

REMARKS

Responsive to the Office action mailed January 3, 2008, applicants request consideration of the following remarks and reconsideration of the rejections set forth in said office action. A petition for a three month extension of time and required fee is filed herewith.

Claims 1-10 were rejected under 35 USC 102(b) as being anticipated by Artuphel, Benoit (US20060052268). Applicants respectfully submit that Artuphel et al. '268 is not a proper reference under 35 USC 102(b).

Artuphel et al. '268 was published March 9, 2006. The present application was filed January 22, 2006, prior to the publication of Artuphel et al. '268. Thus, Artuphel et al. '268 did not describe the present invention more than one year prior to the date of the application for patent in the United States. Furthermore, the present application claims priority to international application PCT/EP2004/007302 filed July 3, 2004, which claims priority to French application number 0310833 filed September 16, 2003. Artuphel et al. '268 claim priority to PCT FR04/00049 which published in French. Thus, the effective date for Artuphel et al. '268 as a reference under 35 USC 102(e) is its English language, US publication date of March 9, 2006. Applicants submit that the rejection of the present application under 35 USC 102(b) based upon Artuphel et al. '268 is improper and must be withdrawn.

Claims 1-10 were rejected under 35 USC 102(b) as being anticipated by Sekiya '846. Applicants respectfully submit that Sekiya et al. '846 fails to anticipate the present invention.

The present invention is directed towards the discovery of a composition comprising a fluorinated base, secondary butanol and optionally DMSO, the novel compositions being particularly suitable for the defluxing of electronic boards containing "no clean" solder fluxes as well as other solder fluxes. The "fluorinated base" of the present invention is intended to mean a mixture of one or more fluorinated compounds having a surface tension of less than 30 mN/m at 25°C (measured according to the ISO 304

standard) and a negligible action on the ozone layer (zero or negligible ODP). The fluorinated compound(s) can be chosen from hydrofluorocarbons (HFCs) and/or hydrofluoro ethers (HFEs). The compositions according to the present invention comprises from 1 to 40% by weight of fluorinated base, from 50 to 99% by weight of secondary butanol and from 0 to 30% by weight of DMSO, the sum of the percentages by weight of the constituents being equal to 100. Preferably, the composition comprises from 15 to 25% by weight of fluorinated base, from 50 to 70% by weight of secondary butanol and from 15 to 25% by weight of DMSO. A majority, 50% or more, of the composition of the present invention is secondary butanol.

Sekiya et al. '846 discloses a composition containing less than 95 mole % a trihydrfluorinated saturated hydrocarbon and a process for making the trihydrfluorinated saturated hydrocarbon. In the process disclosed by Sekiya et al. '846 an organic solvent is employed. The amount of solvent added is preferably between 2 and 30% by weight. Column 6, line 56. The type of solvent is not particularly limited (column 6, line 60) and can be selected from a wide variety of organic solvents. Applicants submit that Sekiya et al. '846 fails to anticipate the specific combination of the present invention which requires 50% or more of sec-butanol in a compositions being particularly suitable for the defluxing of electronic boards. The selection of such a concentration of the specific material, sec-butanol, in combination with a fluorinated base is not anticipate or render obvious by the disclosure in Sekiya et al. '846 of the use of alcohols as solvents in a process for producing trihydrfluorinated saturated hydrocarbons.

Claims 1-10 were rejected under 35 USC 102(b) as being anticipated by Yamada et al. '759. Applicants respectfully submit that Yamada et al. '759 fails to anticipate the present invention.

Yamada et al. '759 discloses a fluorinated hydrocarbon with excellent cleaning action. Applicants submit that Yamada et al. 759 fails to disclose a composition comprising 50% or more of sec-butanol. At column 7, lines 51-60, Yamada et al. '759 discloses that the fluorinated hydrocarbon component of Yamada's composition is the principal component. Thus, the "other " components of the composition

disclosed by Yamada et al. '759 cannot comprise 50% or more of the composition. At column 7, line 31 Yamada et al. '759 discloses the use of 8.4% of 2-butanol in a composition of that invention. Applicants submit that Yamada et al. '759 fails to anticipate the specific combination of the present invention which requires 50% or more of sec-butanol in a compositions being particularly suitable for the defluxing of electronic boards.

Claims 1-10 were rejected under 35 USC 102(b) as being anticipated by Kiyohara et al. '557. Applicants respectfully submit that Keyboard et al. '557 fails to anticipate the present invention.

Kiyohara et al. '557 discloses a polyamide resin composition. The polyamide resin can be dissolved in a wide variety of solvents including organic solvents and alcohol solvents and halogen solvents. At column 5, lines 38-40, Kiyohara et al. '557 discloses that an organic solvent can be mixed with an alcohol solvent. However, there is no disclosure of the possibility of mixing an alcohol solvent and a halogen solvent. Furthermore, there is no disclosure of the specific combination of the present invention which requires 50% or more of sec-butanol in combination with a fluorinated base in a compositions being particularly suitable for the defluxing of electronic boards. Applicants submit that Kiyohara et al. '557 fails to anticipate the specific combination of the present invention.

Claims 1-10 were rejected under 35 USC 102(b) as being anticipated by Tsuzaki '456. Applicants respectfully submit that Tsuzaki '456 fails to anticipate the present invention.

Tsuzaki '456 discloses a solvent composition comprising a combination of dichloropentafluoropropane and (perfluorobutyl)methyl ether in a specified range of ratios. It is disclosed that at most 40% of a wide variety of materials including alcohols can be added to adjust solvency. Applicants submit that there is no disclosure of the specific combination of the present invention which requires 50% or more of sec-butanol in combination with a fluorinated base in a compositions being particularly suitable for the defluxing of electronic boards. Applicants submit that Tsuzaki '456 fails to anticipate the specific combination of the present invention.

Claims 1-10 were rejected under 35 USC 102(b) as being anticipated by Hanada et al. '035. Applicants respectfully submit that Hanada et al. '035 fails to anticipate the present invention.

Hanada et al. '035 discloses a solvent composition in which at most 40% may comprises a compound selected from alcohols, ketones, halogenated hydrocarbons, ethers and esters. Applicants submit that there is no anticipation of a solvent composition which comprises 50% or more a sec-butanol in combination with a fluorinated base as claimed in the present application. Applicants submit that Hanada et al. '035 to anticipate the specific combination of the present invention.

Claims 1-10 were rejected under 35 USC 102(b) as being anticipated by Kitamura et al. '699. Applicants respectfully submit that Kitamura et al. '699 fails to anticipate the present invention.

Kitamura et al. '699 discloses a solvent composition which includes dichloropentafluoropropane and trans,1-2-dichloroethylene and methanol. At column 3, lines 9-15 Kitamura et al. '699 discloses that one or more of a wide variety of materials may be added to control solubility in amounts preferably from 0.1 to 30 wt %. Applicants submit that there is no anticipation of a solvent composition which comprises 50% or more a sec-butanol in combination with a fluorinated base as claimed in the present application. Applicants submit that Kitamura et al. '699 fails to anticipate the specific combination of the present invention.

Claims 1-10 were rejected under 35 USC 102(b) as being anticipated by Behr et al. '090. Applicants respectfully submit that Behr et al. '090 fails to anticipate the present invention.

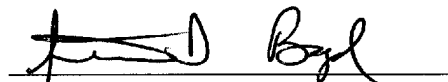
Behr et al. '090 discloses a composition comprising perfluoroalkyl haloalkyl ethers and optionally surfactants. At column 9, line 16, Behr et al. '0090 discloses the use of co-solvents. The relative amounts of the components is disclosed at column 9, lines 26-32. The composition of Behr, et al. '090 is disclosed as comprising 50 –99 parts of the perfluoroalkyl haloalkyl ether component per 100 parts of combined ether and co-solvent. Applicants submit that with the disclosed relative amounts of Behr, et al. '090 the co-solvent can not comprise 50% or more of the composition. Applicants submit that Behr et al. '090 fails to anticipate the specific combination of the present invention.

In view of the foregoing remarks, applicant respectfully submits that claims 1-10 of the present

application are in condition for allowance and prompt favorable action is solicited.

Respectfully submitted,

Date: July 1, 2008

A handwritten signature in black ink, appearing to read "S.D. Boyd", written over a horizontal line.

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